AFOEHL REPORT 90-202EQ00669LHH

Hazardous Waste Technical Assistance Survey
Lajes Field, Azores

NANCY S. HEDGECOCK, 1Lt, USAF, BSC
PATRICK T. McMULLEN, Capt, USAF, BSC

November 1990

Final Report

AF Occupational and Environmental Health Laboratory (AFSC)
Human Systems Division
Brooks Air Force Base, Texas 78235-5501

NOTICES

When Government drawings, specifications, or other data are used for any purpose other than a definitely related Government procurement operation, the Government incurs no responsibility or any obligation whatsoever. The fact that the Government may have formulated, or in any way supplied the drawing, specifications, or other data, is not to be regarded by implication, or otherwise, as in any manner licensing the holder or any other person or corporation; or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

The mention of trade names or commercial products in this publication is for illustration purposes and does not constitute endorsement or recommendation for use by the United States Air Force.

The Public Affairs Office has reviewed this report, and it is releasable to the National Technical Information Service, where it will be available to the general public, including foreign nations.

This report has been reviewed and is approved for publication.

Air Force installations may direct requests for copies of this report to: Air Force Occupational and Environmental Health Laboratory (AFOEHL) Library, Brooks AFB TX 78235-5501.

Other Government agencies and their contractors registered with the DTIC should direct requests for copies of this report to: Defense Technical Information Center (DTIC), Cameron Station, Alexandria VA 22304-6145.

Non-Government agencies may purchase copies of this report from: National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield VA 22161

PATRICK T. MCMULLEN, Capt, USAF, BSC
Chief, Hazardous Waste Function

EDWIN C. BANNER III, Col, USAF, BSC
Chief, Bioenvironmental Engineering Division

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	November 1990	Final 11-14 Jun 90

4. TITLE AND SUBTITLE

Hazardous Waste Technical Assistance Survey,
Lajes Field Azores

5. FUNDING NUMBERS

6. AUTHOR(S)

Nancy S. Hedgecock, 1Lt, USAF, BSC
Patrick T. McMullen, Capt, USAF, BSC

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

AF Occupational and Environmental Health Laboratory
Brooks AFB TX 78235-5501

8. PERFORMING ORGANIZATION REPORT NUMBER

AFOEHL Report
90-202EQ00669LHH

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

Same as Blk 7

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/AVAILABILITY STATEMENT

Statement A. Unlimited, approved for public release

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

At the request of HQ MAC/LGMW, THE AFOEHL conducted a hazardous waste technical assistance survey at Lajes Field from 11-14 Jun 90. The scope of this survey was to address hazardous waste management practices and explore opportunities for hazardous waste minimization. The survey team performed a shop-by-shop evaluation of chemical waste management practices and met with hazardous waste managers and engineers to discuss the hazardous waste program. Recommendations include: (1) Amend training to include specific examples of Lajes Field operations. (2) Upgrade satellite accumulation sites. (3) Verify proper disposal of waste oil by local contractor. (4) Treat perchloroethylene sludge as a hazardous waste. (5) Amend the base spill plan to address specific requirements for calling on the base Spill Response Team. (6) Evaluate the operating efficiency of the hospital incinerator.

14. SUBJECT TERMS

Hazardous Waste Program Hedgecock Management
Lajes Field McMullen

15. NUMBER OF PAGES

36

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	none

(This page left blank)

ACKNOWLEDGEMENT

The authors wish to thank the personnel at Lajes Field who provided information and logistics support during the survey. Capt Macola, Chief, Bioenvironmental Engineering Services (BES), MSgt James Bellon, NCOIC, and the entire BES staff were especially supportive of the mission during this survey.

CONTENTS

I. INTRODUCTION

On 5 Mar 1990, HQ MAC/LGMW requested through HQ MAC/SGPB that the Air Force Occupational and Environmental Health Laboratory (AFOEHL) perform a Hazardous Waste Technical Assistance Survey at Lajes Air Field, Azores (LFLD) (Appendix A). Base personnel were particularly concerned with hazardous waste management and disposal practices, and waste minimization opportunities.

The survey was conducted by Capt Pat McMullen and Lt Nancy Hedgecock from 11-14 Jun 90.

II. OBJECTIVE

Visit all shops which generate chemical waste to gather data on quantities generated and process information for use in making waste minimization recommendations.

III. BACKGROUND

A. Base Description

Lajes Field is a MAC resource located on the island of Terceria, one of the three islands that make up the Azores Islands. Lajes Field is a tenant of the Portugese Government who control the Azores. The base is home of the 1605 Military Airlift Wing and its primary mission is to serve as a refueling stop in the Atlantic Ocean.

B. Procedure

The first step of the survey was to review the Staff Assistance Visit Report and the Environmental Coordinator's chemical inventory. Each major industrial waste generating activity was then visited. Their industrial operations were observed and disposal practices were discussed.

Each hazardous waste accumulation site and satellite accumulation site were visited and evaluated by the survey team. The following personnel were contacted about their responsibility and involvement in the hazardous waste program:

Maj Van Ness, Base Civil Engineer
Capt Macola, Chief, Bioenvironmental Engineering
Capt Daniels, Environmental Coordinator
Capt Massie, Maint Waste Minimization POC
Capt Mendes, Political Affairs Representative
Ms Delagrange, DRMO Representative

C. Hazardous Waste Program Overview

The hazardous waste program at Lajes Field is managed the same as stateside installations. The Environmental and Contract Planning Office in

Civil Engineering, 1605 CES/DEEV is the office of Primary Responsibility (OPR). The Defense Reutilization and Marketing Office (DRMO) is responsible for contractual removal of wastes. Bioenvironmental Engineering (BES) helps monitor the program through industrial shop surveys and is responsible for waste sampling at the request of DEEV.

Individual shops are responsible for identifying, segregating, handling, packaging, and labeling the wastes generated by their shop. The wastes are usually placed in a 55-gallon drum or bowser located either at a satellite accumulation site or at an accumulation site.

When wastes require disposal, the generator completes an AF Form 2005 and submits it to Base Supply. Supply generates a DD Form 1348-1 using the information contained on the AF Form 2005. The DD Form 1348-1 is approved by the Environmental Coordinator indicating that funds are available for disposal of the waste. The generator contacts the 1605 CES to arrange for the waste containers to be inspected before they are transported to DRMO. Once the inspections are completed, the generator transports the waste to DRMO and submits the DD Form 1348-1 to DRMO who arranges for disposal. All waste is either sold to a local contractor for recycling or shipped to England.

The waste oil sold to a local waste oil disposal contractor brings 3-10 cents per gallon. The market for waste oil determines the payment received. Wastes are identified by either wastestream analysis or user's knowledge before being transferred to the DRMO Storage Facility. BES is responsible for sampling unknown wastes and other wastestreams on an as needed basis. Samples are sent to the AF Occupational and Environmental Health Laboratory, Analytical Services Division (AFOEHL/SA) for analyses. Results are sent back to BES who notifies DEEV of the results.

IV. FINDINGS AND RECOMMENDATIONS

A. DEEV is responsible for training accumulation site monitors. The first training class was conducted in March. The three-hour class instructed the monitors on the procedures for handling and storing hazardous wastes. DEEV plans to give the class semiannually. Many shop personnel are confused about some of the hazardous waste procedures and expressed a need for more one-on-one attention.

REC. The training program should include more specific guidance on proper hazardous waste handling and storing procedures.

B. Most accumulation sites are located outdoors without any means of containing spills or leaks. Also, some storage containers were not locked to prevent waste cross-contamination.

REC. Although not required by law, it would be advantageous to Lajes Field to upgrade the accumulation sites with, at a minimum, covers, locking fences or locking containers, and impermeable, diked surfaces (or if the drums are stored indoors, they should be placed on drip pans). These measures could help prevent the occurrence of environmental pollution incidents.

REC. Waste storage containers should be locked to prevent cross-contamination of wastes. Also, accumulation site managers (including waste oil and fluid managers) should document accumulation site activity by maintaining a log to include: (1) a unique sequence number to identify which wastestream generated the waste (each wastestream in a shop should have a unique number), (2) date, type, and amount of waste put into the drum (see Table 5 for example), and (3) start and stop dates of filling each drum. A uniform system for documentation should be used by all accumulation site managers on base. This type of log can provide documented rationale for using user's knowledge rather than analytical results for waste disposal.

Example Hazardous Waste Disposal Log

PAINT SHOP HAZARDOUS WASTE DISPOSAL
LOG FOR DRUM NUMBER: 1

Date	Type of Waste	Amount of Waste	Name & Signature
10 Jun 88	Enamel Paint	1 qt	
10 Jun 88	MEK	1 gal	
15 Jun 88	MEK	1 gal	
20 Jun 88	Polyurethane Paint	1 qt	
25 Jun 88	Poly Thinner	1 gal	
30 Jun 88	MEK	10 gal	
5 Jul 88	Enamel Paint	1 qt	
6 Jul 88	MEK	2 gal	
6 Jul 88	Enamel Paint	1 qt	
7 Jul 88	MEK	2 gal	
8 Jul 88	MEK	2 gal	
9 Jul 88	MEK	2 gal	
11 Jul 88	MEK	2 gal	
13 Jul 88	Enamel Paint	1 qt	
13 Jul 88	MEK	2 gal	
14 Jul 88	MEK	2 gal	
16 Jul 88	Enamel Paint	1 qt	
16 Jul 88	MEK	5 gal	
18 Jul 88	Polyurethane Paint	2 qts	
18 Jul 88	Poly Thinner	3 gal	
20 Jul 88	MEK	4 gal	
21 Jul 88	MEK	1 gal	
28 Jul 88	Enamel Paint	1 gal	
28 Jul 88	MEK	7 gal	
	TOTAL:	50 gal	

Amounts.

MEK	43.00 gal	86.00%
Polyurethane Thinner	4.00 gal	8.00%
Enamel Paint	2.25 gal	4.50%
Polyurethane Paint	0.75 gal	1.50%

C. All petroleum products (oil, fluid, and PD-680) are drummed together and sold to a contractor. Neither DRMO or DEEV are certain of how the contractor disposes the waste. It is reasonable that periodically, a shipment could be identified by the disposal facility as "unsuitable" for energy recovery. The base must ensure that such a shipment is not disposed in a manner that would endanger the environment.

REC. DEEV or DRMO should verify and document at least annually the ultimate waste petroleum product disposal.

D. The drain leading from the NAF Photo Shop rinse tank drains onto the asphalt pad.

REC. This drain should be connnected to the sanitary sewer.

E. Perchloroethylene used at the Base Laundry is filtered, distilled and reused. The sludge (20 gallons/month) is disposed as municipal waste. If this sludge contains residual perchloroethylene, it poses the potential for aquifer contamination.

REC. BES should sample the sludge for perchloroethylene. If it contains perchloroethylene, it should be drummed and disposed as hazardous waste.

F. The South Tank Farm sludge pit is no longer used. Currently, when the tanks are cleaned the contractors are putting the sludge back into the fuel system. This practice is unacceptable.

REC. The cleaning contractors should be closely supervised during tank cleaning procedures. The waste fuel sludge should be drummed and disposed through DRMO.

G. According to the CES Liquid Fuels personnel, they are responsible for cleaning up all spills on base (regardless of quantity of spilled material) and for disposing of the spill material.

REC. The spill plan should address the quantity of spill that requires Liquid Fuels to respond. Individual shops should be capable of cleaning up small spills. Also, the shop that spills the material should be responsible for disposing the spill clean up material.

H. Several sulfuric acid carboys are stacked in the 1605 TRANS Vehicle Maintenance Battery Room. The containers are poorly stacked and there is insufficient means to respond to a chemical spill.

REC. All excess sulfuric acid should be stored on the shelves (below eye level) in the supply room.

I. Batteries are neutralized in a 4-gallon metal container at TRANS Vehicle Maintenance Battery Room.

REC. The shop should convert an empty plastic 55- or 80-gallon drum to a neutralization tank.

J. Waste fixed from the NAF photo lab is drummed and disposed through DRMO.

REC. NAF fixer should be sent to Lajes Hospital for silver recovery.

K. All infectious waste from the hospital is autoclaved and incinerated. Operators complained the incinerator was not maintaining an adequate temperature to effectively destroy the waste.

REC. The Air Quality Branch of AFOEHL will mail guidance on hospital incinerators to the base BEE and environmental coordinator. Civil Engineering should then review this information and evaluate the incinerator during a full burn cycle to assess effectiveness.

V. SUMMARY OF WASTE DISPOSAL PRACTICES AT LAJES FIELD

The waste disposal practices for different waste categories are summarized in this section. A summary of disposal practices for each waste category is contained in Appendix D.

A. Waste oil and fluid are placed in bowsers or 55-gallon drums and sold to a local contractor for 3 to 10 cents/gallon. The payment is based on demand at the time of disposal.

B. Waste JP-4 and MoGas are generally collected in drip pans or buckets and transferred to fuel bowsers. The fuel is analyzed by the fuels lab and usually blended back into the main base fuel supply. Fuels lab personnel were not certain on the fate of contaminated fuel as they rarely had that situation.

C. Waste paint and thinner are generally placed in either a 5-gallon can or 55-gallon drum and stored at the appropriate accumulation site. This material is then transferred to DRMO for disposal.

D. Waste antifreeze is discharged directly to the sanitary sewer.

E. Waste PD-680 is added to the waste oil and fluid drums and sold to a local contractor.

F. Spent lead-acid batteries from vehicle maint are disposed through DRMO; those from the 1605 MASS AGE are recycled.

G. Waste fixer from the NAF photo lab is drummed and disposed through DRMO. Waste fixer from the hospital x-ray and base photo labs is processed through a silver recovery unit and discharged to the sanitary sewer. All other photo chemicals are discharged to the sanitary sewer.

H. Water from the 1605 Trans Body Shop is discharged to the sanitary sewer. Rinsewater from triple rinsing entomology spray containers is recycled.

I. Most shop rags are cleaned at the base laundry and reissued, some shops dispose of these rags as municipal waste.

J. Perchloroethylene sludge from the base laundry dry cleaning equipment is drummed and disposed as municipal waste.

K. Empty aerosal cans are disposed as municipal waste.

L. Paint filters from the 1605 MASS AGE dry paint booth are disposed as municipal waste.

M. All chemicals used in the hospital laboratories are used in process or discharged to the sanitary sewer.

N. Infectious waste from the hospital is autoclaved and incinerated.

References

1. Samplers and Sampling Procedures for Hazardous Waste Streams, EPA-600/2-80-018, January 1980.

2. United States Environmental Protection Agency, "Resource Conservation and Recovery Act (RCRA)." 40 CFR 260-280.

(This page left blank)

Appendix A

Request Letter

This page left blank

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS MILITARY AIRLIFT COMMAND
SCOTT AIR FORCE BASE, ILLINOIS 62225-5001

REPLY TO ATTN OF: LGMW

SUBJECT: Request for Hazardous Waste Technical Assistance Survey (Our Ltr, 12 Jan 90)

TO: HQ MAC/SGPB (Ltr) 6 MAR 90
USAF OEHL/ECQ
IN TURN

1. In addition to the locations in our previous letter, we request you do a hazardous waste technical assistance survey at Lajes Fld in Jun 90.

2. HQ MAC/SGPB POC is CMSgt Adams, AUTOVON 576-2306, and HQ MAC/LGMWF POC is SMSgt Annis, AUTOVON 576-3254.

3. We appreciate your assistance in adding Lajes to your survey schedule.

RICHARD A. YODER, JR., Lt Col, USAF
Chief, Weapon Systems Division
Directorate of Maintenance Engineering

(This page left blank)

Appendix B

Summary of Waste Disposal Practices for Each Waste Category

This page left blank

SUMMARY OF WASTE DISPOSAL PRACTICES FOR EACH WASTE CATEGORY

WASTE: FUEL

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
1605 SUP	Fuel	20	REC
1605 TRANS Refueling Maint	Fuel	NR	DRMO
1605 MASS AGE	Fuel	NR	REC
1605 TRANS Refueling Maint	Fuel	NR	OWS
1605 SUPS Fuels Distrib	Fuel	NR	REC

WASTE: Oil and Fluid

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
1605 CES Power Plant	Oil and Fluid	8400	SBC
TTU Vehicle Maint	Oil and Fluid	80	SBC
1605 TRANS Equipment Maint	Oil and Fluid	250	SBC
1605 MASS EN MAINT	Oil and Fluid	NR	SBC
1605 SERVS Auto Hobby	Oil	400	SBC
1605 TRANS Vehicle Maint	Oil and Fluid	1200	SBC
1605 TRANS Refueling Maint	Oil and Fluid	250	SBC
1605 MASS AGE	Oil and Fluid	620	SBC
	TOTAL:	16600	

WASTE: Solvent

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
1605 CES Paint Shop	Solvent	6	UIP
Base Laundry	Solvent	NR	UIP
	TOTAL:	6	

WASTE: Waste Paint/Thinner

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
1605 MASS AGE	Paint Thinner	60	DRMO
1605 TRANS Paint and Body Shop	Paint & Thinner	110	DRMO
	TOTAL:	170	

SUMMARY OF WASTE DISPOSAL PRACTICES FOR EACH WASTE CATEGORY

WASTE: Antifreeze

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
1605 TRANS Refueling Maint	Antifreeze	NR	SS
	TOTAL:	NR	

WASTE: Batteries

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
1605 TRANS Vehicle Maint	Batteries	70	DRMO
1605 MASS AGE	Batteries	36	REC
1605 SERVS Auto Hobby	Batteries	NR	SBC
	TOTAL:	106	

WASTE: Soap

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
1605 TRANS Vehicle Maint	Soap	600	UIP
1605 MASS AGE	Aircraft Soap	360	SS
	TOTAL:	960	

WASTE: Photo and NDI Chemicals

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
USAF Hospital Medical X-Ray	Developer	40	SS
USAF Hospital Dental X-Ray	Fixer	2	SRDD
NAF Photo	Fixer	80	DRMO
Base Photo Lab	Developer	36	SS
USAF Hospital Medical X-Ray	Fixer	40	SRDD
Base Reproduction	Repo Chemicals	NR	UIP
Base Photo Lab	Fixer	36	SRDD
NAF Photo	Developer	80	SS
	TOTAL	314	

SUMMARY OF WASTE DISPOSAL PRACTICES FOR EACH WASTE CATEGORY

WASTE: Shop rags

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
1605 MASS AGE	Shop Rags	NR	BL
1605 TANS Paint and Body Shop	Shop Rags	NR	MW
1605 TRANS Refuelling Maint	Shop Rags	NR	MW
1605 SERVS Auto Hobby	Shop Rags	NR	MW
1605 ABG Paint Shop	Shop Rags	NR	MW
	TOTAL	NR	

WASTE: Aerosol Cans

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
1605 TRANS Refueling Maint	Aerosol Cans	NR	MW
1605 TRANS Paint and Body Shop	Aerosol Cans	NR	MW
	TOTAL:	NR	

WASTE: PD-680

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
1605 TRANS Vehicle Maint	PD-680	30	SBC
1605 SERVS Auto Hobby	PD-680	150	SBC
1605 MASS AGE	PD-680	120	SBC
1605 TRANS Equipment Maint	PD-680	20	DRMO
NAF Airframe	PD-680	100	SBC
	TOTAL:	420	

WASTE: Sludges

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
Base Laundry	Sludge	240	DRMO
	TOTAL:	240	

WASTE: Rinsewater

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
USAF Hospital Medical Lab	Infectious Waste	0	AI
	TOTAL:	0	

WASTE: Paint Filters

SHOP	WASTE	QTY (GAL/YR)	DISPOSAL
1605 MASS AGE	Paint Filters	144	MW
	TOTAL:	144	

Appendix C

Summary of Waste Disposal Practices by Shops

This page left blank

DISPOSAL PRACTICES BY SHOP AT LAJES AIR FIELD

SHOP: 1605 ABG Paint Shop — Building: 575

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Thinner	6	UIP
Shop Rags	NR	MW
TOTAL:	6	

SHOP: 1605 CES Entomology — Building: 183

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Rinsewater	600	Rec
TOTAL:	600	

SHOP: 1605 CES Power Plant — Building: 200

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Oil and Fluid	8400	SBC
TOTAL:	8400	

SHOP: 1605 MASS AGE — Building: 705

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Paint Filters	144	MW
PD-680	120	SBC
Aircraft Soap	360	SS
Batteries	36	REC
Paint Thinner	60	DRMO
Oil and Fluid	600	SBC
Shop Rags	NR	BL
Fuel	NR	REC
TOTAL:	1320	

SHOP: 1605 MASS EN MAINT — Building: 800

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Oil and fluid	NR	SBC
TOTAL:	NR	

DISPOSAL PRACTICES BY SHOP AT LAJES AIR FIELD

SHOP: 1605 SERVS Auto Hobby — Building: 100

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Shop Rags	NR	MW
Oil	400	SBC
Batteries	NR	SBC
PD-680	150	SBC
TOTAL:	550	

SHOP: 1605 SUP — Building: 1207

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Fuel	20	Rec
TOTAL:	20	

SHOP: 1605 SUP Fuels Distrib — Building: 76

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Fuel	NR	REC
TOTAL:	NR	

SHOP: 1605 TRANS Equipment Maint — Building: 767

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
PD 680	20	HW
Oil and Fluid	250	SBC
TOTAL:	270	

SHOP: 1605 TRANS Paint and Body Shop — Building: 260

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Sludge	NR	DRMO
Rinse Water	2400	SS
Paint & Thinner	110	DRMO
Aerosol Cans	NR	MW
Shop Rags	NR	MW
TOTAL:	2510	

DISPOSAL PRACTICES BY SHOP AT LAJES AIR FIELD

SHOP: 1605 TRANS Refueling Maint Building: 768

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Antifreeze	NR	SS
Aerosol Cans	NR	MW
Fuel	NR	OWS
Fuel	NR	DRMO
Oil and Fluid	250	SBC
Shop Rags	NR	MW
TOTAL:	250	

SHOP: 1605 TRANS Vehicle Maint Building: 216

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Soap	600	UIP
PD-680	30	SBC
Batteries	70	DRMO
Oil and Fluid	1200	SBC
TOTAL:	1900	

SHOP: Base Laundry Building: 331

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Solvent	NR	UIP
Sludge	240	MW
TOTAL:	240	

SHOP: Base Photo Lab Building: 630

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Fixer	36	SRDD
Developer	36	SS
TOTAL:	72	

SHOP: Base Reproduction Building: 630

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Repo Chemicals	NR	UIP
TOTAL:	NR	

DISPOSAL PRACTICES BY SHOP AT LAJES AIR FIELD

SHOP: NAF Airframe — Building: 810

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
PD-680	100	SBC
TOTAL:	100	

SHOP: NAF Photo — Building: 810

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Fixer	80	DRMO
Developer	80	SS
TOTAL:	160	

SHOP: TTU Vehicle Maint — Building: 100

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Oil and Fluid	80	SBC
TOTAL:	80	

SHOP: USAF Hospital Medical X-Ray — Building: 241

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Fixer	40	SRDD
Developer	40	SS
TOTAL:	80	

SHOP: USAF Hospital Dental X-Ray — Building: 238

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Developer	1	SS
Fixer	1	SRDD
TOTAL:	2	

SHOP: USAF Hospital Medical Laboratory — Building: 241

WASTE PRODUCT	QTY (GAL/YR)	DISPOSAL
Infectous Waste	NR	AI
TOTAL:	NR	

Appendix D

Summary of Wastes Drummed for Disposal Through DRMO

This page left blank

WASTE DRUMMED FOR DISPOSAL THROUGH DRMO

Type of Waste: Fuel

SHOP	BLDG	PRODUCT	QTY (GAL/YR)
1605 TRANS Refueling Maint	768	Fuel	NR

Type of Waste: Paint Thinner

SHOP	BLDG	PRODUCT	QTY (GAL/YR)
1605 MASS AGE	705	Paint Thinner	60
1605 TRANS Paint and Body Shop	260	Paint & Thinner	110

Type of Waste: Batteries

SHOP	BLDG	PRODUCT	QTY (GAL/YR)
1605 TRANS Vehicle Maint	216	Batteries	70

Type of Waste: Fixer

SHOP	BLDG	PRODUCT	QTY (GAL/YR)
NAF Photo	NR	Fixer	80

Type of Waste: Sludge

SHOP	BLDG	PRODUCT	QTY (GAL/YR)
1605 TRANS Paint and Body Shop	260	Sludge	NR
		Total:	320

(This page left blank)

Appendix E

Master List of Shops

This page left blank

MASTER LIST OF SHOPS

Shop	Contact	Building
1605 TRANS		
Equip Maint		767
Paint & Body Shop	SSgt Bresse	260
Refueling Maint	SSgt Norris	768
Vehicle Maint	MSgt Smith	216
1605 CES		
Entomology	SSgt Spears	183
Power Plant		200
Paint Shop	Mr Cavender	575
1605 MASS		
AGE	MSgt Wenrick	705
EnRoute Maint	MSgt Wenrick	800
1605 Services		
Auto Hobby	Mr Beato	100
Base Laundry	Mr Ourique	331
1605 Supply		
Fuels Laboratory	SSgt Crawford	76
Fuels Distribution	TSgt Weidig	76
1605 MAW		
Base Photo Lab	SSgt Edwards	630
Base Reproduction	MSgt Willison	630
NAF		
Airframe	AmHZ WP Tungate	810
Photo Lab	Petty Officer Robinson	810
TTU		
Vehicle Maint	Sgt Leon	100
USAF Hospital		
Medical X-Ray	MSgt Clay	241
Dental X-Ray	SrA Bowman	238
Medical Laboratory	SSgt Wilson	241

(This page left blank)

Distribution List

	Copies
HQ AFSC/SGP Andrews AFB DC 20334-5000	1
HQ USAF/SGPA Bolling AFB DC 20332-6188	1
HQ MAC/SGPB Scott AFB IL 62225-5001	2
HQ MAC/DE Scott AFB IL 62225-5001	1
HQ MAC/LGMW Scott AFB IL 62225-5001	2
AAMRL/TH Wright-Patterson AFB OH 45433-6573	1
7100 CSW Med Cen/SGB APO New York 09220-5300	1
Det 1, AFOEHL APO San Francisco 96274-5000	1
USAFSAM/TSK Brooks AFB TX 78235-5301	1
USAFSAM/ED/EDH/EQ Brooks AFB TX 78235-5301	1 ea
Defense Technical Information Center (DTIC) Cameron Station Alexandria VA 22304-6145	2
HQ USAF/LEEV Bolling AFB DC 20330-5000	1
HQ AFESC/RDV Tyndall AFB FL 32403-6001	1
USAF Hospital Lajes/SGPB APO New York 09406-5300	3
1605 ABG/DE APO New York 09406-5000	3
HQ HSD/XA Brooks AFB TX 78235-5000	1

Distribution List Cont'd

	Copies
OO-ALC/MME Hill AFB UT 84056-5000	1
OC-ALC/MME Tinker AFBOK 73145-5000	1
SA-ALC/MME Kelly AFB TX 78241-5000	1
SM-ALC/MME McClellan AFB CA 95642-5000	1
WR-ALC/MME Robins AFB GA 31098-5000	1